

TECHNICAL DIRECTION MEMORANDUM NO. 4

TECHNICAL ASSISTANCE FOR
THE CHARACTERIZATION OF MINE WASTES
GALENA SUBSITE
CHEROKEE COUNTY, KANSAS

Revised Draft JUNE 1989
(Original Draft APRIL 1989)

EPA W.A. NO. 223-7L37

Section 1
INTRODUCTION

This is the forth revision to the original scope of work for the Galena operable unit technical assistance work assignment. The purpose of this Technical Direction Memorandum (TDM) to is modify the scope of the impending supplemental field pilot testing activities presented in Work Plan Revision Request (WPRR) NO. 3.

Section 2
BACKGROUND

The purpose of the field pilot testing activities are to provide valuable information towards determining the selection of the new preferred remedy. Originally, two alternatives scheduled for testing (the PRP purposed alternative and the EPA modified alternative). Both alternatives were an approach to backfilling the mine wastes into the existing mine voids and are described in more detail in WPRR NO. 3. After several technical discussions with the PRP group concerning their alternative, they have decided to withdraw their alternative from the testing program. In addition, a group of the PRPs have elected to support the pilot testing program by conducting the work activities



S00022738
SUPERFUND RECORDS

Section 3
PROJECT SCOPE

Phase 1

The scope of the first phase, characterization, will be modified to the extent that CH2M Hill will provide oversight only. The first phase is expected to last approximately 5-6 days, during this time the mine waste materials being used in the pilot testing program will be selected and collected to the testing site. CH2M Hill will provide one staff member on site during this phase of work.

Oversight activities will consist of taking notes and photographs, and reporting to the RPM or the SM every day concerning the site activities and their progress. Also, CH2M HILL will provide and operate a field portable XRF unit to field determine lead and zinc contents of mine waste materials for these tests.

Any disagreement, between the CH2M HILL observer and the PRP's group representative, or violation of the agreed upon testing procedure will be reported to the RPM for resolution.

Phase 2

The scope of the second phase, pilot plant operations, will also be modified to the extent that CH2M Hill will provide oversight only. One CH2M Hill staff member will be on sight during the complete second phase of field activities. The second phase will last approximately 10-12 days and will involve two leach test types

The first leach test type will consist of approximately twelve (12) batch tests defined by the PRP group and will use the mine waste materials collected during the mine waste characterization phase. The second test type will be conducted on the mine waste material collected during phase one and test the EPA modified backfill alternative where the mine waste material is deposited in the existing mine voids below the water table based upon material size. These tests will be conducted as flow-through tests using the groundwater collected from the mine voids and characterized in phase one, and as described in WPRR NO. 3.

Oversight will consist of the same activities as described in phase one except that no XRF measurements will be made. Additionally, a final field summary report will be prepared by CH2M HILL at the conclusion of the field pilot testing program.

Section 4
SUMMARY OF TASKS

The tasks and subtasks scoped in WPRR NO. 3 to support the Cherokee County Pilot Testing project will remain essentially the same. The level of effort for each task will be adjusted to compensate for the activities conducted by the PRP group.

Upon successful completion of each phase of the field pilot testing program conducted by the PRP group, a TDM will be submitted to EPA to adjust the budgets of each task and subtask

